Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A catheter adapted for deployment in a body vessel to occlude flow and remove material located distal to a site of occlusion, comprising:

an outer elongated hollow shaft configured for introduction into a blood vessel,
an expandable occluder proximate to a distal end of the outer shaft, which
expands to create a distal occlusion within the vessel to isolate a region proximal of the occluder
from vasculature distal of the occlusion,

a proximal adaptor having an efflux port in fluid communication with an outer shaft lumen that provides for the removal of fluid and material through an opening distal of the distal occlusion and a treatment port,

an inner elongated and hollow shaft configured to slide longitudinally within the outer shaft and extending distal of the distal occlusion, wherein the inner shaft terminates in a rinse head having one or more rinse holes that traverse a side wall of the rinse head to force fluid contents of an inner shaft lumen through the one or more rinse holes in the region distal of the expandable occluder in a flow pattern determined by the arrangement of the one or more rinse holes and substantially directed toward side walls of the body vessel, wherein the distal end of the inner elongated hollow shaft is free of an expandable occluder, and

an influx port in fluid communication with the inner shaft lumen, and

wherein the treatment port that removably receives the inner elongated hollow

shaft and provides access to the lumen of the outer shaft.

2. (Previously Presented) The device of claim 1, wherein the expandable occluder is inflatable and is connected to an inflation lumen incorporated into a wall of the outer elongated shaft.

Appl. No. 09/872,068 Amdt. dated April 4, 2005 Reply to Office Action of October 14, 2004

3. (Previously Presented) The device of claim 1, wherein the expandable occluder is inflatable and is connected to an inflation lumen extending through a separate, hollow elongated shaft that runs parallel to the outer shaft.

Claim 4. (Canceled)

- 5. (Currently Amended) The device of claim 1, wherein the inner shaft is configured to allow passage of a guidewire through the inner shaft and that extends through an opening in the distal wall of the inner shaft.
- 6. (Original) The device of claim 1, wherein the expandable occluder is self-expanding.
- 7. (Previously Presented) The device of claim 1, wherein the expandable occluder comprises open-cell foam surrounded by an air-tight sheath and the open-cell foam is in fluid communication with an inflation lumen incorporated into the wall of the outer shaft.
- 8. (Previously Presented) The device of claim 1, wherein the expandable occluder comprises open-cell foam surrounded by an air-tight sheath and the open-cell foam is in fluid communication with an inflation lumen in a separate, hollow elongated shaft that runs parallel to the outer shaft.
- 9. (Previously Presented) The device of claim 1, further comprising means for varying rates of fluid flow through the influx port or the outflux port in a manually controlled or programmed fashion.
- 10. (Original) The device of claim 1, further comprising means for inducing fluid flow within the vessel at or near the treatment site at physiologically relevant flow levels.
- 11. (Previously Presented) The device of claim 1, further comprising a stent delivery catheter introduced through the treatment port and the outer shaft lumen.

Appl. No. 09/872,068 Amdt. dated April 4, 2005 Reply to Office Action of October 14, 2004

- 12. (Previously Presented) The device of claim 1, further comprising an angioplasty catheter introduced through the treatment port and the outer shaft lumen.
- 13. (Previously Presented) The device of claim 1, further comprising a filter introduced through the treatment port and the outer shaft lumen.

Claim 14. (Canceled)

- 15. (Previously Presented) The device of claim 1, wherein the inner shaft lumen is sized and configured for passage of a guidewire.
- 16. (Previously Presented) The device of claim 1, wherein the inner shaft lumen is terminated on a distal end by a flexible seal configured to allow passage of a guidewire and to form a fluid tight seal around the guidewire.
- 17. (Original) The device of claim 1, further comprising a guidewire fixedly attached to a distal end of the inner shaft.

Claims 18-66. (Canceled)

- 67. (Previously Presented) The catheter of claim 1, wherein fluid communication between the inner shaft lumen and the rinse nozzle is configured to eject fluid along an entire distal length of an outer surface of the inner shaft.
- 68. (Previously Presented) The catheter of claim 1 wherein the inner elongated and hollow shaft is the only lumen delivering fluid distal of the expandable occluder.

Claim 69. (Canceled)